INFORMATION DISCLOSURE CITATION IN AN APPLICATION	ATTY. DOCKET NO. **066662-0092**	SERIAL NO. **09/923,870**
	APPLICANT **Palsson**	
(PTO-1449)	FILING DATE **August 6, 2001**	GROUP **1631**

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code (if known)		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US	5,273,038	12-28-1993	Beavin, et al.	
	2.	US	5,914,891	06-22-1999	Arkin, et al.	
	3.	US	5,930,154	07-27-1999	Thalhammer-Reyero, C.	
	4.	US	5,947,899	09-07-1999	Scollan, et al.	
	5.	US	5,980,096	11-09-1999	Thalhammer-Reyero	
	6.	US	2002/0012939	01-31-2002	Palsson, et al.	
	7.	US	2002/0051998	05-02-2002	Schmidt, et al.	
	8.	US	2003/0224363	12-04-2003	Park, et al.	
	9.	US	2004/0029149	02-12-2004	Palsson, et al.	
	10.	US	2004/0009466	01-15-2004	Maranas, et al.	
	11.	US	2004/0072723	12-04-2003	Park, et al.	
	12.	US	2006/0147899	07-06-2006	Famili, et al.	
	13.	US	2007/0111294	05-17-2007	Burgard, et al.	

FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	DOCUMENT NUMBER	DATE	COUNTRY	Pages, Columns, Lines Where Relevant Figures Appear	Translation Yes	No
	14.	WO 01/061115	08-08-2002	PCT			

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	15.	Akutsu, "Estimation Algorithm of Genetic Network," Mathmatical Science (Suri-Kagaku) _Science_ 37(6)40-46 (1999). (Original and English translation submitted herewith).
	16.	Aristidou and Penttila, "Metabolic engineering applications to renewable resource utilization," _Curr. Opin. Biotechnol._, 11(2)187-198 (2000).
	17.	Benjamini and Hochberg, "Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing," _J.R. Statist. Soc. B._ 57:289-300 (1995).
	18.	Callis, "Regulation of Protein Degradation," _Plant Cell_ 7:845-857 (1995).
	19.	Chadha et al., "Hybrid process for ethanol production from rice straw," _Acta. Microbiol. Immunol. Hung._ 42(1):53-59 (1995).
	20.	Chadha et al., "Simultaneous saccharification and fermentation of rice straw into ethanol," _Acta. Microbiol. Immunol. Hung._ 42(1):71-75 (1995).
	21.	Christensen and Nielsen, "Metabolic network analysis. A powerful tool in metabolic engineering," _Adv. Biochem Engi Biotech_,66:209-231 (2000).

EXAMINER	DATE CONSIDERED

SDO 176269-1.066662.0092

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

*This reference is not attached. Will be provided under separate cover.

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(PTO-1449)	FILING DATE **August 6, 2001**	GROUP **1631**

	22.	Clarke, "Stability of Complex Reaction Networks," <u>Adv. Chem. Physics</u> 43:1-125 (1980).
	23.	Cover and Blaser, "Helicobacter pylori infection, a paradigm for chronic mucosal inflammation: pathogenesis and implications for eradication and prevention," <u>Adv. Intern. Med.</u> 41:85-117 (1996).
	24.	Dafoe et al., "In Silico Knowledge Discovery Biomedical databases," Proceedings of the SPIE Fifth Workshop on Neural Networks, San Francisco, November 7-10, 1993.
	25.	Dooley et al., "An all D-amino acid opiod peptide with central analgesic activity from a combinatorial library," <u>Science</u> 266(5193):2019-2022 (1994).
	26.	Duarte et al., "Reconstruction and validation of Saccharomyces cerevisiae iND750, a fully compartmentalized genome-scale metabolic model," <u>Genome Res.</u> 14(7):1298-1309 (2004).
	27.	Edwards and Palsson, "The Escherichia coli MG1655 in silico Metabolic Genotype: Its Definition, Characteristics, and Capabilities," <u>Proc. Natl. Acad. Sci. USA</u> 97(10):5528-5533 (2000).
	28.	Edwards et al., "Characterizing Phenotypic Plasticity: A Phase Plane Analysis," <u>BMES/EMBS Conference, Proceedings of the First Joint</u> Vol. 2, p. 1217 (1999).
	29.	Feist and Palsson, "The growing scope of applications of genome-scale metabolic reconstructions using Escherichia coli," <u>Nat. Biotech.</u> 26(6):659-667 (2008).
	30.	Fleischmann, "Whole-genome random sequencing and assembly of Haemophilus influenzae Rd," <u>Science</u> 269(5223):496-512 (1995).
	31.	Ge, et al., "Cloning and functional characterization of Helicobacter pylori fumarate reductase operon comprising three structural genes coding for subunits C, A and B," <u>Gene</u> 204(1-2):227-234 (1997).
	32.	Kelly, "The physiology and metabolism of the human gastric pathogen Helicobacter pylori," <u>Adv. Microb. Physiol.</u> 40:137-189 (1998).
	33.	Kremling, et al., "The organization of metabolic reaction networks. III. Application for diauxic growth on glucose and lactose," <u>Metab. Eng.</u> 3(4):362-379 (2001).
	34.	Mahadevan and Schilling, "The effects of alternate optimal solutions in constraint-based genome-scale metabolic models," <u>Metab. Eng.</u> 5(4):264-276 (2003).
	35.	Marshall and Warren, "Unidentified curved bacilli in the stomach of patients with gastritis and peptic ulceration," <u>Lancet</u> 1(8390):1311-1315 (1984).
	36.	McAdams and Shapiro, "Circuit simulation of genetic networks," <u>Science</u> 269(5224):650-656 (1995).
	37.	Mendz et al., "Fumarate reductase: a target for therapeutic intervention against Helicobacter pylori," <u>Arch. Biochem. Biophys.</u> 321(1):153-159 (1995).
	38.	Mendz et al., "Glucose utilization and lactate production by Helicobacter pylori," <u>J. Gen. Microbiol.</u> 139(12):3023-3028 (1993).
	39.	Mendz and Hazell, "Fumarate catabolism in Helicobacter pylori," <u>Biochem. Mol. Biol. Int.</u> 31(2):325-332 (1993).
	40.	Mendz et al., "Salvage synthesis of purine nucleotides by Helicobacter pylori," <u>J. Appl. Bacteriol.</u> 77(6):674-681 (1994).
	41.	Palsson, "What Lies Beyond Bioinformatics," <u>Nat. Biotech.</u> 15:3-4 (1997).

EXAMINER	DATE CONSIDERED

SDO 176269-1.066662.0092

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	APPLICANT Palsson	
(PTO-1449)	FILING DATE August 6, 2001	GROUP 1631

	42.	Patel and West, "Degradation of the pyrimidine bases uracil and thymine by Escherichia coli B" <u>Microbios.</u> 49(199):107-113 (1987).	
	43.	Raclot et al., "Selective release of human adipocyte fatty acids according to molecular structure," <u>Biochem. J.</u> 324 (Pt3):911-915 (1997).	
	44.	Sauer et al., "Metabolic Capacity of Bacillus Subtilis for the Production of Purine Nucleosides, Riboflavin, and Folic Acid," <u>Biotechnol. Bioeng.</u> 59(2):227-238 (1998).	
	45.	Savinell and Palsson, "Network Analysis of Intermediary Metabolism using Linear Optimization. II. Interpretation of Hybridoma Cell Metabolism," <u>J. Theor. Biol.</u> 154:455-473 (1992).	
	46.	Savinell and Palsson, "Network Analysis of Intermediary Metabolism using Linear Optimization. I. Development of Mathematical Formalism," <u>J Theor Biol</u> 154:421-454 (1992).	
	47.	Schena, et al., "Quantitative monitoring of gene expression patterns with a complementary DNA microarray," <u>Science</u> 270(5235):467-470 (1995).	
	48.	Schilling and Palsson, "The Underlying Pathway Structure of Biochemical Reaction Networks," <u>Proc. Natl. Acad. Sci. USA</u> 95(8):4193-4198 (1998).	
	49.	Schilling, "On Systems Biology and the Pathway Analysis of Metabolic Networks," Department of Bioengineering, University of California, San Diego: La Jolla 198-241 (2000).	
	50.	Sedivy and Fraenkel, "Fructose bisphosphatase of Saccharomyces cerevisiae. Cloning, dusruption and regulation of the FBP1 structural gene.," <u>J. Mol. Biol.</u> 186(2):307-319 (1985).	
	51.	Selkov, et al., "The metabolic pathway collection from EMP: the enzymes and metabolic pathways database," <u>Nucleic Acids Res.</u> 24(1):26-28 (1996).	
	52.	Sherlock, et al., "The physiology of L-methionine catabolism to the secondary metabolite ethylene by Escherichia coli," <u>Curr. Opin. Immunol.</u> 12:201-205 (2000).	
	53.	Shipston and Bunch, "The physiology of L-methionine catabolism to the secondary metabolite ethylene by Escherichia coli," <u>J. Gen. Microbiol.</u> 135(6), 1489-1497 (1989).	
	54.	Silve et al., "The immunosuppressant SR 31747 blocks cell proliferation by inhibiting a steroid isomerase in Saccharomyces cerevisiae," <u>Mol. Cell Biol.</u> 16(6):2719-2727 (1996).	
	55.	Tanaka and Zerez, "Red cell enzymopathies of the glycolytic pathway," <u>Semin. Hematol.</u> 27(2):165-185 (1990).	
	56.	Tandeitnik, et al., "Modeling of biological neurons by artificial neural networks," Nineteenth Convention of Electrical and Electronics Engineers in Israel, Jerusalem, Israel, New York, NY USA, pages 239-242 (1996).	
	57.	Taniguchi and Tanaka, "Clarification of interactions among microorganisms and development of co-culture system for production of useful substances," <u>Adv. Biochem. Eng. Biotechnol.</u> 90:35-62 (2004).	
	58.	Venter, et al., "Shotgun sequencing of the human genome," <u>Science</u> 280(5369):1540-1542 (1998).	

EXAMINER	DATE CONSIDERED

SDO 176269-1.066662.0092

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	APPLICANT **Palsson**	
(PTO-1449)	FILING DATE **August 6, 2001**	GROUP **1631**

	59.	Vo, et al., "Reconstruction and functional characterization of the human mitochondrial metabolic network abased on proteomic and biochemical data," J. Biol. Chem. 279(38):39532-39540 (2004).
	60.	Waterston and Sulston, "The Human Genome Project: reaching the finish line," Science 282(5386):53-54 (1998).
	61.	Wills and Melham, "Pyruvate carboxylase deficiency in yeast: a mutant affecting the interaction between the glyoxylate and Krebs cycles.", Arch. Biochem. Biophys. 236(2):782-791 (1985).
	62.	Winzeler, et al., "Functional characterization of the S. cerevisiae genome by gene deletion and parallel analysis," Science 285(5429):901-906 (1999).
	63.	Xie and Wang, "Material Balance Studies on Animal Cell Metabolism Using a Stoichiometrically Based Reaction Network," Biotech. Bioeng. 52:579-590 (1996).
	64.	Xie and Wang, "Energy Metabolism and ATP Balance in Animal Cell Cultivation Using a Stoichiometrically Based Reaction Network," Biotech. Bioeng. 52:591-601 (1996).
	65.	Zeng, et al., "Use of respiratory quotient as a control parameter for optimum oxygen supply and scale-up of 2,3-butanediol production under microaerobic conditions," Biotechnol. Bioeng. 44(9):1107-1114 (1994).
	66.	Zigova, "Effect of RQ and pre-seed conditions on biomass and galactosyl transferase production during fed-batch culture of S. cerevisiae BT150," J. Biotechnol. 80(1):55-62 (2000).
	67.	URL affymetrix.com/index.affx; Date Obtained: 09-18-2009.
	68.	URL affymetrix.com/products/arrays/specific/ecoli antisense.affx.: Date Obtained: 09-18-2009.
	69.	URL asap.ahabs.wisc.edu/annotation/php/logon.php, The ASAP website.; Date Obtained: 09-07-2009.
	70.	URL ca.expasy.org/sprot/, protein database SWISS—PROT: Date Obtained: 06/15/2009.
	71.	URL chem.qmw.ac.uk/iubmb/enzyme/, Enzyme Nomenclature database maintained by G.P. Moss of Queen Mary and Westfield College in the United Kingdom; Date Obtained; 09-18-2009.
	72.	URL dchip.org, dChip software; Date Obtained 06-15-2009.
	73.	URL Dictionary.com pgs 1-2 (2004), Matrix; Date Obtained 11-01-2004.
	74.	URL ecocyc.panbio.com/ecocyc/ecocyc.html, EcoCyc; Date Obtained 09-18-2009.
	75.	URL enzobio.com/lifesci_index.htm, Enzo BioArray Terminal Labeling Kit protocol; Date Obtained 09-18-2009.
	76.	URL genetics.wisc.edu/, E. coli Genome Project at the University of Wisconsin; Date Obtained 09-18-2009.
	77.	URL Genome.jp Website, KEGG Bacillus subtillis, 1-7; Date Obtained 06-01-2005.
	78.	URL genome.tugraz.at/Software/Genesis/Description.html, "Genesis" software; Date Obtained; 09-18-2009.
	79.	URL igweb.integratedgenomics.com/MPW/, Metabolic pathways database (MPW); Date Obtained 09-18-2009.

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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(PTO-1449)	FILING DATE **August 6, 2001**	GROUP **1631**

	80.	URL integratedgenomics.com, ERGO from Integrated Genomics; Date Obtained 09-18-2009.	
	81.	URL mips.gsf.de/proj/yeast/pathways/ on 06/06/08, MIPS, website: Comprehensive Yeast Genome Database – Pathways; Date Obtained: 09-18-2009.	
	82.	URL ncbi.nlm.gov, Genbank genome database; Date Obtained 06/15/2009.	
	83.	URL ncbi.nlm.nih.gov/entrez/query.fcgi?db=Genome, The NCBI Entrez Genome database; Date Obtained 06/15/2009.	
	84.	URL ncbi.nlm.nih.gov/LocusLink/, LocusLink database maintained by the NCBI; Date Obtained 06-15-2009.	
	85.	URL ncbi.nlm.nih.gov/Taxonomy/taxonomyhome.html/; Date Obtained 09-18-2009.	
	86.	URL nslij-genetics.org/search_omim.html, Online Mendelian Inheritance in Man database, Center for Medical Genetics, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine (Bethesda, MD); Date Obtained 09-18-2009.	
	87.	URL qiagen.com, Qiagen RNeasy Mini Kit; Date Obtained 09-18-2009.	
	88.	URL rana.lbl.gov/EisenSoftware.htm, "Cluster" software; Date Obtained 09-18-2009.	
	89.	URL genome-www.stanford.edu/~sherlock/cluster.html, "XCluster" software; Date Obtained 09-18-2009.	
	90.	URL systembiology.ucsd.edu; Date Obtained 09-18-2009.	
	91.	URL tigr.org, ,The Institute for Genome Research, J Craig Venter Institute; Date Obtained 09-18-2009.	
	92.	URL tula.cifn.unam.mx:8850/regulondb/regulon_intro.frameset; Date Obtained 09-18-2009.	
	93.	URL workbench.sdsc.edu/, Biology Workbench; Date Obtained 09-18-2009.	
	94.	URL wit.mcs.anl.gov/WIT/, What is There (WIT); Date Obtained 09-18-2009.	
	95.	URL. www.i-sis.org.uk/WITBRL.php; Hoppert, M; Date Obtained 11-23-2008.	

EXAMINER	DATE CONSIDERED

SDO 176269-1.066662.0092